

Application Serial No. 10/709,491

Docket No. 22.1539

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Withdrawn) Apparatus for use in well operations, comprising:

a downhole tool having a thermal coating.
2. (Currently Amended) ~~The apparatus of claim 1, wherein the downhole tool is a perforating gun.~~ Apparatus for use in well operations, comprising:

a downhole tool perforating gun having a thermal coating.
3. (Original) The apparatus of claim 2, wherein the perforating gun comprises:

a hollow carrier,

wherein the thermal coating surrounds the hollow carrier.
4. (Original) The apparatus of claim 2, wherein the perforating gun comprises:

a loading tube,

wherein the thermal coating surrounds the loading tube.
5. (Original) The apparatus of claim 4, wherein the loading tube is fabricated from metal.
6. (Original) The apparatus of claim 4, wherein the loading tube is fabricated from pulp paper.
7. (Original) The apparatus of claim 4, wherein the loading tube is fabricated from plastic.
8. (Original) The apparatus of claim 4, wherein the loading tube is fabricated from polystyrene.

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9. (Original) The apparatus of claim 2, wherein the perforating gun comprises:
a shaped charge,
wherein the thermal coating surrounds the shaped charge.
10. (Original) The apparatus of claim 9, wherein the shaped charge is a capsule charge.
11. (Original) The apparatus of claim 9, wherein the shaped charge is a non-capsule charge.
12. (Original) The apparatus of claim 2, wherein the perforating gun comprises:
a propellant,
wherein the thermal coating surrounds the propellant.
13. (Withdrawn) The apparatus of claim 1, wherein the downhole tool is a tubing cutter.
14. (Withdrawn) The apparatus of claim 13, wherein the tubing cutter comprises:
a housing,
wherein the thermal retardant coating surrounds the housing.
15. (Withdrawn) The apparatus of claim 13, wherein the tubing cutter comprises:
a shaped charge,
wherein the thermal coating surrounds the shaped charge.
16. (Withdrawn) The apparatus of claim 1, wherein the downhole tool is a detonator.
17. (Withdrawn) The apparatus of claim 16, wherein the detonator comprises:
an exploding foil initiator,
wherein the thermal coating surrounds exploding foil initiator.

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18. (Withdrawn) The apparatus of claim 16, wherein the detonator comprises:
- an exploding foil initiator;
 - a capacitor discharge unit in connection with the initiator;
 - an initiator board in connection with the capacitor discharge unit;
 - a processor in connection with the initiator board; and
 - a battery in connection with the initiator board,
- wherein the thermal coating surrounds the exploding foil initiator, the capacitor discharge unit, the initiator board, the processor, and the battery.
19. (Withdrawn) The apparatus of claim 1, wherein the downhole tool is a detonating cord.
20. (Withdrawn) The apparatus of claim 1, wherein the downhole tool is an explosive actuator.
21. (Amended) The apparatus of claim 1, wherein the thermal coating is a thermal intumescent coating.
22. (Withdrawn) A perforating gun for use in a wellbore, comprising:
- a shaped charge containing an explosive;
 - a loading tube for holding the shaped charge; and
 - a hollow carrier for carrying the loading tube into the wellbore,
- wherein the shaped charge is surrounded by a thermal coating.
23. (Withdrawn) The perforating gun of claim 22, wherein the loading tube is surrounded by a thermal coating.
24. (Withdrawn) The perforating gun of claim 23, wherein the hollow carrier is surrounded by a thermal coating.

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25. (Original) A method of protecting a downhole tool for use in a well, comprising:
applying a thermal coating to the downhole tool.
26. (Withdrawn) Apparatus for use in holding a downhole tool, comprising:
a container having an outer surface and defining an inner volume to receive the downhole tool;
and
a thermal coating applied to the outer surface of the container.
27. (Withdrawn) Apparatus of claim 26, further comprising: packing material adapted to
secure the downhole tool within the inner volume of the container, the packing material having a
thermal coating.
28. (Withdrawn) Apparatus for use in securing a downhole tool, comprising:
packing material adapted to surround the downhole tool in a container, the packing material
having a thermal coating.
29. (Withdrawn) A method of protecting a downhole tool, comprising:
providing a container to hold the downhole tool;
applying a thermal coating to the container; and
placing the downhole tool within the container.
30. (Withdrawn) The method of claim 29, further comprising:
providing a packing material to secure the downhole tool in the container;
applying a thermal coating to the packing material; and
positioning the packing material around the downhole tool within the container.

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31. (Withdrawn) A method of protecting a downhole tool, comprising:

providing a packing material to secure the downhole tool in a container;

applying a thermal coating to the packing material; and

positioning the packing material around the downhole tool within the container.